## REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-12 will be pending. By this amendment, claims 1 and 4 have been amended. No new matter has been added.

Objection to the Drawings

In the Office Action, the Examiner has objected to the Drawings. The drawings have been corrected, thereby obviating the objection. Accordingly, it is respectfully requested that this objection be withdrawn.

Objections to the Specification

In Section 1 of the Office Action, the Examiner has objected to the Abstract for having more than one paragraph. A replacement Abstract has been proposed, thereby obviating the objection. Accordingly, it is respectfully requested that this objection be withdrawn.

In Section 2 of the Office Action, the Examiner has objected to the Specification for failing to include section headings. The Specification has been amended, thereby obviating the objection. Accordingly, it is respectfully requested that this objection be withdrawn.

§102 Rejection of Claims 1-5 and 9

In Section 5 of the Office Action, the Examiner has rejected claims 1-5 and 9 under 35 U.S.C. §102(e) as being anticipated by Jiang *et al.* (U.S. Patent No. 6,539,353; hereinafter referred to as "Jiang"). This rejection is respectfully traversed below.

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In the Background section of the Specification, it is indicated, "[o]ne major

drawback of conventional methods and devices for large vocabulary speech recognition is

the large complexity and the large number of possible candidates of speech fragments or

elements to be searched for and to be tested. Without limiting the scope of subject-matter

and therefore the scope of vocabulary, all possible candidates for speech elements or speech

fragments have to be evaluated by distinct searching techniques." *Background of the

Specification, page 3, lines 1-6.*

To address the above-described drawback of the conventional methods and devices for

large vocabulary speech recognition, the steps of method claim 1, as presented herein, provide

for "determining at least one series of words being most probable to correspond to said speech

phrase by applying a predefined language model to said at least one series of hypothesis speech

elements, wherein ... (1) determining at least one sub-word, word, or a combination of words

most probably being contained as a seed sub-phrase in said received speech phrase; and (2)

continuing determining words or combinations of words, which are consistent with said seed

sub-phrase as at least a first successive sub-phrase which is contained in said received speech

phrase, <u>by using and evaluating additional and paired and/or higher order information between

the sub-phrases</u>, thereby decreasing the burden of searching." *Claim 1 (emphasis added).*

Therefore, the speech recognition method of claim 1 operates to evaluate the paired and/or

higher-order information <u>between</u> the sub-phrases (*e.g.* n-tuples of sub-phrases) to decrease the

burden of searching.

Jiang, however, "provides a set of likelihoods that a <u>particular sequence of words will

appear in the language of interest.</u> ... In one embodiment, the language model is a compact

trigram model that <u>determines the probability of a sequence of words</u> based on the combined

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probabilities of three-word segments of the sequence." *Jiang, column 4, lines 33-44 (emphasis added).* Jiang's method takes a sequence of words and tries to match the sequence to the sequence found in the language model. Thus, Jiang's method would require performing a relatively large number of comparisons of sequences to obtain a match because Jian's method fails to teach or suggest evaluating relational information between sub-phrases divided into pairs/higher-order information (*e.g.* n-tuples of sub-phrases) to reduce the number of searches.

Based on the foregoing discussion regarding Jiang with respect to claim 1, and since claims 2-12 depend from claim 1, it is submitted that claims 1-5 and 9 are not anticipated by the teachings of Jiang. Accordingly, it is submitted that the Examiner's rejection of claims 1-5 and 9 based upon 35 U.S.C. §102(e) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 6-7 and 10-12

In Section 7 of the Office Action, the Examiner has rejected claims 6-7 and 10-12 under 35 U.S.C. §103(a) as being unpatentable over Jiang in view of Chou *et al.* (U.S. Patent No. 5,797,123; hereinafter referred to as "Chou"). This rejection is respectfully traversed below.

Based on the foregoing discussion regarding Jiang with respect to claims 1-12, it is submitted that Jiang fails to teach or suggest the method disclosed in claims 6-7 and 10-12. Since Section 7 of the Office Action indicates that Chou teaches limited vocabulary word spotting, it is submitted that Jiang and Chou, in combination or individually, fail to teach or suggest the method disclosed in claims 6-7 and 10-12. Accordingly, it is submitted that the Examiner's rejection of claims 6-7 and 10-12 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Allowable Subject Matter of Claim 8

It is appreciatively noted that claim 8 would be allowable if rewritten in independent

form.


Conclusion

In view of the foregoing, entry of this amendment, and the allowance of this application

with claims 1-12, is respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this

application, it is submitted that these claims, as originally presented, are patentably distinct over

the prior art of record, and that these claims were in full compliance with the requirements of 35

U.S.C. §112. Changes that have been made to these claims were not made for the purpose of

patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes

were made simply for clarification and to round out the scope of protection to which Applicant is

entitled.

In the event that additional cooperation in this case may be helpful to complete its

prosecution, the Examiner is cordially invited to contact Applicant's representative at the
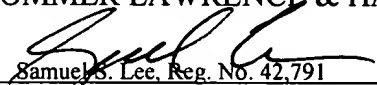
telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any

overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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Attachments

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